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What Is Claimed Is:

1. (previously presented) A process of machining inner joint parts of constant velocity universal ball joints, which inner joint parts comprise a longitudinal axis (A) and at least one guiding face by which the inner joint part is orbitally angularly movably guided in a ball cage, and which comprise a plurality of ball tracks which are distributed around the circumference of the guiding face and which ball tracks divide the guiding face into a corresponding plurality of guiding webs and in which ball tracks torque transmitting balls can be held so as to be longitudinally displaceable, comprising, simultaneously machining one ball track and at least one guiding web.

2.-26. (cancelled)

27. (new) A process according to claim 1, wherein with uneven numbers of ball tracks and guiding webs, one ball track and one radially opposed guiding web each are machined simultaneously.

28. (new) A process according to claim 1, wherein, with even numbers of ball tracks and guiding webs, one ball track and one guiding web adjoining the radially opposed ball track are each machined simultaneously.

29. (new) A process according to claim 1, wherein two ball tracks and two guiding webs are each machined simultaneously.

30. (new) A process according to claim 1 comprising simultaneously machining in the longitudinal direction synchronously, two ball tracks positioned in planes extending parallel relative to one another, and machining at least one guiding web at least partially simultaneously therewith.

31. (new) A process according to claim 30, wherein two ball tracks positioned in planes extending parallel relative to one another are machined by jointly driven tools.

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32. (new) A process of machining inner joint parts of constant velocity universal ball joints, which inner joint parts comprise a longitudinal axis (A) and are provided with at least one guiding face by which the inner joint part is orbitally angularly movably guided in a ball cage, and which comprise a plurality of ball tracks which are distributed around the circumference of the guiding face, which ball tracks divide the guiding face into a corresponding number of guiding webs and in which ball tracks torque transmitting balls are held so as to be longitudinally displaceable, comprising, simultaneously machining at least two ball tracks in the longitudinal direction.

33. (new) A process of machining inner joint parts of constant velocity universal ball joints, which inner joint parts comprise a longitudinal axis (A) and are provided with at least one guiding face by which the inner joint part is orbitally angularly movably guided in a ball cage, and which comprise a plurality of ball tracks which are distributed around the circumference of the guiding face, which ball tracks divide the guiding face into a corresponding number of guiding webs and in which ball tracks torque transmitting balls are held so as to be longitudinally displaceable, comprising, simultaneously machining at least two guiding webs in the longitudinal direction.

34. (new) A process according to claim 32, wherein, with uneven numbers of ball tracks and guiding webs, a first ball track or web face and the second ball track or guiding web adjoining the radially opposed web face or ball track are each machined simultaneously.

35. (new) A process according to claim 33, wherein, with uneven numbers of ball tracks and guiding webs, a first ball track or web face and the second ball track or guiding web adjoining the radially opposed web face or ball track are each machined simultaneously.

36. (new) A process according to claim 32, wherein, with even numbers of ball tracks and guiding webs, two radially opposed ball tracks or guiding webs are each machined simultaneously.

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37. (new) A process according to claim 33, wherein, with even numbers of ball tracks and guiding webs, two radially opposed ball tracks or guiding webs are each machined simultaneously.

5 38. (new) A process according to claim 1, wherein the ball tracks are machined by rotating tools whose axes of rotation (R) perpendicularly cross the longitudinal axis (A) of the inner joint part and whose center is guided in radial planes (X) which, relative to the inner joint part, extend through the longitudinal axis (A).

10 39. (new) A process according to claim 32, wherein the ball tracks are machined by rotating tools whose axes of rotation (R) perpendicularly cross the longitudinal axis (A) of the inner joint part and whose center is guided in radial planes (X) which, relative to the inner joint part, extend through the longitudinal axis (A).

15 40. (new) A process according to claim 33, wherein the ball tracks are machined by rotating tools whose axes of rotation (R) perpendicularly cross the longitudinal axis (A) of the inner joint part and whose center is guided in radial planes (X) which, relative to the inner joint part, extend through the longitudinal axis (A).

20 41. (new) A process according to claim 1, wherein the ball tracks are machined by rotating tools whose axis of rotation extends substantially radially relative to the longitudinal axis (A) of the inner joint part, wherein the axis of rotation, relative to the inner joint part, is guided in radial planes extending through the longitudinal axis (A) of the inner joint part.

42. (new) A process according to claim 1, wherein the guiding webs are machined by rotating tools whose axis of rotation (R) perpendicularly crosses the longitudinal axis (A) of the inner joint part and whose center is guided in radial planes which, relative to the inner joint part, extend through the longitudinal axis (A).

25 43. (new) A process according to claim 32, wherein the guiding webs are machined by rotating tools whose axis of rotation (R) perpendicularly crosses the

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longitudinal axis (A) of the inner joint part and whose center is guided in radial planes which, relative to the inner joint part, extend through the longitudinal axis (A).

44. (new) A process according to claim 33, wherein the guiding webs are machined by rotating tools whose axis of rotation (R) perpendicularly crosses the longitudinal axis (A) of the inner joint part and whose center is guided in radial planes which, relative to the inner joint part, extend through the longitudinal axis (A).

45. (new) A process according to claim 42, wherein the guiding webs are machined by rotating tools whose center, relative to the inner joint part, additionally pivots around its longitudinal axis (A).

46. (new) A device for machining inner joint parts of constant velocity universal ball joints, which inner joint parts comprise a longitudinal axis (A) and at least one guiding face by which the inner joint part is orbitally angularly movably guided in a ball cage, and which comprise a plurality of ball tracks which are distributed around the circumference of the guiding face and which ball tracks divide the guiding face into a corresponding plurality of guiding webs and in which ball tracks torque transmitting balls can be held so as to be longitudinally displaceable, the device comprising:

a clamp for an inner joint part and at least two rotating tools, the clamp and at least two rotating tools being adapted to simultaneously machine at least one ball track and at least one guiding web.

47. (new) A device for machining inner joint parts of constant velocity universal ball joints, which inner joint parts comprise a longitudinal axis (A) and at least one guiding face by which the inner joint part is orbitally angularly movably guided in a ball cage, and which comprise a plurality of ball tracks which are distributed around the circumference of the guiding face and which ball tracks divide the guiding face into a corresponding plurality of guiding webs and in which ball tracks torque transmitting balls can be held so as to be longitudinally displaceable, the device comprising:

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a clamp for an inner joint part and at least two rotating tools, the clamp and at least two rotating tools being adapted to simultaneously machine two ball tracks in the longitudinal direction.

48. (new) A device for machining inner joint parts of constant velocity
5 universal ball joints, which inner joint parts comprise a longitudinal axis (A) and at least one guiding face by which the inner joint part is orbitally angularly movably guided in a ball cage, and which comprise a plurality of ball tracks which are distributed around the circumference of the guiding face and which ball tracks divide the guiding face into a corresponding plurality of guiding webs and in which ball tracks torque transmitting balls
10 can be held so as to be longitudinally displaceable, the device comprising:

a clamp for an inner joint part and at least two rotating tools, the clamp and at least two rotating tools being adapted to simultaneously machine two guiding webs in the longitudinal direction.

49. (new) A device according to claim 47, wherein the clamp
15 comprises a feeding element to ensure feeding in the longitudinal direction (Z) of the inner joint part, and wherein the at least two rotating tools comprise feeding mechanisms to ensure feeding only in the radial direction relative to the longitudinal direction of the inner joint part.

50. (new) A device according to claim 48, wherein the clamp
20 comprises a feeding element to ensure feeding in the longitudinal direction (Z) of the inner joint part, and wherein the at least two rotating tools comprise feeding mechanisms to ensure feeding only in the radial direction relative to the longitudinal direction of the inner joint part.

51. (new) A device according to claim 46, wherein the axes of rotation
25 (R) of all rotating tools which simultaneously engage the inner joint part are positioned in a common plane.

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52. (new) A device according to claim 47, wherein the axes of rotation (R) of all rotating tools which simultaneously engage the inner joint part are positioned in a common plane.

53. (new) A device according to claim 48, wherein the axes of rotation (R) of all rotating tools which simultaneously engage the inner joint part are positioned in a common plane.

54. (new) A device according to claim 51, wherein the axes of rotation (R) of the rotating tools are positioned at least in two parallel planes.

55. (new) A device according to claim 46, wherein the clamp is rotatingly adjustable around the longitudinal axis of the inner joint part.

56. (new) A device according to claim 47, wherein the clamp is rotatingly adjustable around the longitudinal axis of the inner joint part.

57. (new) A device according to claim 48, wherein the clamp is rotatingly adjustable around the longitudinal axis of the inner joint part.

58. (new) A device according to claim 46, wherein the rotating tools for the ball tracks are disc tools whose axes of rotation cross the longitudinal axis (A) of the inner joint part at a distance from one another.

59. (new) A device according to claim 47, wherein the rotating tools for the ball tracks are disc tools whose axes of rotation cross the longitudinal axis (A) of the inner joint part at a distance from one another.

60. (new) A device according to claim 46, wherein the rotating tools for the ball tracks are finger tools whose axes of rotation are aligned substantially radially relative to the longitudinal axis (A) of the inner joint part.

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61. (new) A device according to claim 47, wherein the rotating tools for the ball tracks are finger tools whose axes of rotation are aligned substantially radially relative to the longitudinal axis (A) of the inner joint part.

5 62. (new) A device according to claim 46, wherein the rotating tools for the guiding webs are disc tools whose axes of rotation cross the longitudinal axis (A) of the inner part at a distance from one another.

63. (new) A device according to claim 48, wherein the rotating tools for the guiding webs are disc tools whose axes of rotation cross the longitudinal axis (A) of the inner part at a distance from one another.

10 64. (new) A device according to claim 46, wherein the rotating tools are rotatingly adjustable around the longitudinal axis (A) of the inner joint part.

65. (new) A device according to claim 47, wherein the rotating tools are rotatingly adjustable around the longitudinal axis (A) of the inner joint part.

15 66. (new) A device according to claim 48, wherein the rotating tools are rotatingly adjustable around the longitudinal axis (A) of the inner joint part.

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